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EXAMINER

MAZUMDAR, SONYA

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/711,645

Applicant(s)

KARLSSON ET AL.

Examiner

Sonya Mazumdar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-14 and 17-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-14 and 17-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's amendment, see page 2 in remarks filed November 26, 2007, with respect to the objection to claim 8, has been fully considered, and the objection has been withdrawn.
2. Applicant's amendments, see page 3 in remarks filed November 26, 2007, with respect to the rejections of claims 10 and 14 under 35 USC 112, 2nd paragraph, have been fully considered, and the rejections have been withdrawn.
3. Applicant's arguments on pages 6 and 7, with respect to claims 8 and 9, have been fully considered but they are not persuasive.

The amendments made to claims 8 and 9 broaden their scope from the previous form, by reciting applying fibers "onto predetermined specific areas of the cover sheet" or applying fibers that are "depending on at least one of" certain fiber properties. The word "or" is taken to mean that only one or the other limitation applies.

First, applicant argues that the references teach complete coating of the sheets. However, no definition of a "predetermined specific area" is given, so the claimed area may be the total area of the cover sheets. Also, no specific density, thickness, length, or orientation of the applied fibers are given to distinguish claim 8.

The rejections of claims 8 and 9, and their dependent claims accordingly, are maintained.

4. Applicant's arguments, see page 7, with respect to the rejection of claims 24-26 under 35 USC 102(b) under Sokolowski, have been fully considered and are persuasive.

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Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Hadley et al. (US 3,958,055)

Response to Amendment

5. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 8 is rejected under 35 U.S.C. 102(b) as being unpatentable by Anderson et al. (US 3,684,637)

Anderson et al. teach a method for producing a laminate with cover sheets (19, 40) and a core there between comprising adhesive and fibers. Before the two cover sheets are joined together, one cover sheet (19) is applied with adhesive (23), and the other cover sheet (40) is initially applied with adhesive (42), fed from a supply source (43) and through a nip formed by a metering roll (44) and an applicator roll (45). Fibers of different kinds (52) are applied onto the cover sheet (40) from a flock supply (53) (column 2, line 13 –column 3, line 60; column 4, lines 50-67; Figure 2). Fiber properties such as density, thickness, length, and orientation relative to the cover sheets are important to consider when producing a laminate with specifically desired characteristics (column 1, lines 38-39; column 3, lines 26-36; column 4, lines 50-68).

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8. Claims 9, 11, 14, and 18 are rejected under 35 U.S.C. 102(b) as being unpatentable by Sobolev (US 5,030,488).

With respect to claims 9 and 11, Sobolev teaches a method for producing laminates comprising two sheets with a filled resin and fibrous core. Before the two sheets are joined together, one cover sheet is applied in certain areas with a mixture of adhesive and fibers by a spray nozzle (abstract; column 8, lines 17-22; column 11, lines 38-45; Figures 1A and 1B).

With respect to claim 14, Sobolev teaches keeping certain areas in a laminate free of a mixture of adhesive and fibers in which it is machined to do so (column 16, lines 11-29; column 17, lines 29-35; Figures 3A and 3B).

With respect to claim 18, Sobolev teaches using a mixture of metallic and non-metallic fibers (column 11, lines 41-44 and lines 59-62).

9. Claims 24 through 26 are rejected under 35 U.S.C. 102(b) as being unpatentable by Hadley et al. (US 3,958,055)

With respect to claim 24, Hadley et al. teach a method of producing laminates comprising two cover sheets (X, Z) with a fibrous core (Figure 2). A patterned adhesive layer (10) is applied onto one sheet (X), then a fiber web (Y) are applied on top of the adhesive pattern, and another sheet (Z) is laminated thereon (column 2, line 64 – column 3, line 20; Figures 1 and 2).

With respect to claim 25, Hadley et al. teach making laminates such as bedsheets and pillow cases (column 1, lines 10-20; column 8, lines 21-38), therefore, it is inherent that the laminates include channels suitable for guiding gaseous media.

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With respect to claim 26, Hadley et al. teach applying adhesive in various geometric patterns, such as squares and crosses (column 6, lines 23-32 and lines 40-68).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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11. Claims 10, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. as applied to claim 8 above, and further in view of Otomine et al. (US 4,142,929)

The teachings of claim 8 are as described above.

With respect to claim 10, Anderson et al. do not teach applying an adhesive by a screen printing method, however, Otomine et al. teach an alternative method of silk screening an adhesive layer (column 3, lines 39-40; column 4, lines 3-9). It would have been obvious to use a screen printing method as Otomine et al. did to if desired to form any complicated letter or graphic adhesive layer to place fibers on.

With respect to claims 22 and 23, Anderson et al. do not teach transferring fibers from a carrier to a cover sheet and removing a carrier thereafter. Otomine et al. teach transferring a fibrous layer (3) from a base (1) to a substrate (7), and then removing the base (Figures 1 through 3).

It would have been obvious to use a transfer method, such as Otomine et al. taught, and one would have been motivated to do so to give the design a better visual effect that direct application may not allow.

12. Claims 12, 13, 17, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al., as applied to claim 8 above, and further in view of Gregorian et al. (US 4,035,532)

The teachings of claim 8 are as described above.

Anderson et al. do not teach using a foamed adhesive, applied substantially in dots. Gregorian et al. teach a method of transferring flock from a temporary substrate to

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a main substrate, by using a foamed adhesive at a desired viscosity to adhere the flock onto the main substrate (column 2, lines 3-9; column 4, lines 10-22; Figure 2).

It would have been obvious to use a foamed adhesive as Gregorian et al. taught to impart breathability to the main substrate with the adhesive's inherent porosity.

13. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al., as applied to claim 8 above, and further in view of Abrams et al. (US 5,858,156)

The teachings of claim 8 are as described above.

Anderson et al. do not teach applying fibers in the form of a positive/negative pattern onto a cover sheet. Abrams et al. teach electrodepositing flock by passing a sheet between potentials of a high voltage electrostatic field, and an electrode is used to give flock a charge and become aligned with the electrical field lines of force (column 5, lines 40-61; column 6, lines 13-35).

It would have been obvious for Anderson et al. to use a method such as Abrams et al. taught, and one would have been motivated to do so as a conventional alternative method in adhering flock to a sheet.

14. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al., as applied to claim 8 above, and further in view of Mesek (US 3,975,222)

The teachings of claim 8 are as described above.

Anderson et al. do not teach directing a steady or swirled stream of air onto the fibers in order to obtain an inordinate orientation of the fibers. Mesek teaches applying fibers through an air stream, which may be of increasing and decreasing fiber content across the stream (abstract; column 9, lines 48-51).

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It would have been obvious to Anderson et al. to apply fibers through an air stream as Mesek taught, and one would have been motivated to do so to make a flexible laminate with loosely compacted fibers.

15. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US '637), as applied to claim 8 above, and further in view of Anderson (US 3,616,007).

The teachings of claim 8 are as described above.

Anderson et al. ('637) do not specifically teach steps of both pre-curing and final curing an adhesive layer. Anderson ('007) teaches softening and reactivating an adhesive material by heat before application of fibers and final curing the adhesive before rolling a laminate up for storage (column 4, lines 16-29).

It would have been obvious to pre-cure an adhesive and perform final curing on a laminate as Anderson ('007) taught, and one would have been motivated to do so to partially embed fibers after pre-curing an adhesive and produce a useable product in a final curing of the adhesive.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonya Mazumdar whose telephone number is (571) 272-6019. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip Tucker can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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